

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

DEC 16 2010

Chief, Rulemaking, Directives, and Editing Branch U.S. Nuclear Regulatory Commission Mail Stop T6-D59
Washington, DC 20555-0001

Dear Sir or Madam:

In accordance with Section 309 of the Clean Air Act and with the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) has reviewed the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Draft Supplement 45 (draft SEIS) regarding Hope Creek Generating Station (HCGS) and Salem Nuclear Generating Station (SNGS), Units 1 and 2 (CEQ #20100426). According to the draft SEIS, the current operating license for HCGS will expire in April 2026 and the licenses for SNGS Unit 1 and Unit 2 will expire in August 2016 and April 2020 respectively. The proposed Federal action would renew the current operating licenses for an additional 20 years.

This draft SEIS was prepared as a plant-specific supplement to the Nuclear Regulatory Commission's (NRC) 1996 Final Generic Environmental Impact Statement for the License Renewal of Nuclear Plants (GEIS), which was prepared to streamline the license renewal process on the premise that in general, the environmental impacts from re-licensing nuclear power plants are similar. That GEIS proposed that NRC develop facility-specific SEIS documents for individual plants as the facilities apply for license renewal. EPA provided comments on the GEIS during the development process in 1992 and 1996.

HCGS and SNGS are located at the southern end of Artificial Island on the Delaware River in Lower Alloways Creek Township, Salem County, New Jersey. SNGS is a two-unit plant which uses pressurized water reactors. The rated electrical output is approximately 1,169 megawatt-electric for Unit 1 and 1,181 megawatt electric for Unit 2. The Salem units have once-through circulating water systems for condenser cooling. HCGS is a one-unit plant which uses a boiling water reactor and has a current electrical output of approximately 1,083 megawatts-electric. HCGS has a closed-cycle circulating water system for condenser cooling that uses a natural draft cooling tower.

Based on the review of the draft SEIS, the EPA has rated the project and document "Lack of Objections" (LO). However, EPA has enclosed some technical comments on the draft SEIS. We also recommend that the final SEIS discuss the internal and external processes and the waste streams that would be candidates for pollution prevention (P2) technologies. Some P2 opportunities may include specific landscaping and reduction of herbicides within the facility

grounds or reduction of sanitary or hazardous (non-radioactive) wastes. We encourage consultation with the Department of Energy's Pollution Prevention office to obtain recommendations that would fit with the processes at both HCGS and SNGS.

We appreciate the opportunity to comment on the draft SEIS. Upon completion of the final SEIS, please send three copies to this office. My staff is available to discuss these comments and provide assistance in responding to these issues. Please feel free to contact Lingard Knutson at (212) 637-3747 if you have any questions.

Sincerely yours,

Grace Musumeci, Acting Chief

Grace Musumea

Strategic Planning and Multi-Media Programs Branch

Enclosures (Rating Sheet, Technical Comments)

EPA Technical Comments on the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 45, Regarding Hope Creek Generating Station and Salem Nuclear Generating Station, Units 1 and 2

- 1. Page 2-35, Line 38. Replace "error of" with "error or."
- 2. Page 2-35, Line 40. Replace "run-on" with "run-off."
- 3. Page 2-73, Line 38. Section 2.1.5 describes the existing power transmission system, not Section 2.2.1 (Land Use).
- 4. Page 2-73, Line 39. This line states that there are four 500kV transmission lines, Page 2-17, Line 14 states that there are five 500kV transmission lines. Please clarify.
- 5. Page 2-100, Line 41. New Castle County is west of Salem County, not east.
- 6. Page 4-7, Line 2. Add "and" after cooling systems.
- 7. Page 4-81, Line 12. "Area" has an added "c" and is used twice unnecessarily.
- 8. Chapter 5 is fraught with spelling errors; and we list some of them below. EPA would also like to suggest that NRC add a "plain language" summary to this chapter, giving the reader a basic understanding of what the environmental impacts of postulated accidents analysis is trying to achieve.
  - a) Page 5-1, Line 3. "Generic" is misspelled.
  - b) Page 5-1, Line 7. "Then" is misspelled.
  - c) Page 5-1, Line 20. "Category" is misspelled.
  - d) Page 5-1, Line 23. The s in GEIS should be capitalized.
  - e) Page 5-2, Line 4. The term "transients" should be defined for the reader.
  - f) Page 5-2, Line 9. "Utilization" is misspelled.
  - g) Page 5-4, Line 9. "Changes" is misspelled.
  - h) Page 5-5, Line 11. IPE is not defined in the chapter or in the Abbreviations and Acronyms section.
  - Page 5-5, Line 17. CDF is not defined in the chapter or in the Abbreviations and Acronyms section.
  - j) Page 5-5, Table 5-3. "Ventilation" is misspelled.

- k) Page 5-6, Table 5-4. "Ruptures," and "Isolation" and "Intact Containment" are misspelled.
- l) Page 5-6, Line 12. "Determining" is misspelled.

# SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION Environmental Impact of the Action

#### LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### **EO-Environmental Objections**

The EPA review has identified significant environmental impacts that must be avoided to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### **EU-Environmentally Unsatisfactory**

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

#### Adequacy of the Impact Statement

#### Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

## Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analysis, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."